

30 (operation body). The input device 500 includes the display unit 29, the input detection unit 45 and a touch-sensitive variable sheet unit 145.

[0281] The display unit 29 has an operation surface and displays a plurality of push button switch images at a time of the input operation. The push button switch images constitute icon images for the input operation. The push button switch images include a key K1 of numeral "1" to a key K10 of numeral "0", a key K11 of symbol "*", a key K12 of a symbol "#", or the like, a key K13 of determination "O" of a cross key, a left facing arrow key K14 thereof, an upward facing arrow key K15 thereof, a right facing arrow key K16 thereof, a downward facing arrow key K17 thereof, a key K18 of "etc", a key K19 of "REW", a left facing arrow stop key K20, a right facing arrow stop key K21, a left facing fast-forward key K22, a fast-forward key K23, a reproduction key K24 and a stop key K25 or the like. As the display unit 29, a color organic EL display device or a liquid crystal display device (LCD device) is used.

[0282] The input detection unit 45 which constitutes the detection unit is provided on the upper portion of the display unit 29. The input detection unit 45 includes the operation surface. The input detection unit 45 is provided on the upper portion of the display unit 29 and operates so as to detect the slide position of the operator's finger or the like. As the input detection unit 45, for example, a capacitive touch panel is used. With respect to the input detection unit 45, anything is available only if the cursoring and the selection function can be distinguished. For example, other than the capacitive input device, it also may be a resistive touch panel, an input device of a surface acoustic wave system (SAW) or an optical system, a tact switch of a multi stage system or the like. Preferably, it may be enough if the input device has a constitution by which position detection information and press detection information can be applied to a control system.

[0283] The transparent touch-sensitive variable sheet unit 145 constituting the touch-sensitive sheet member is provided on the upper portion of the input detection unit 45. The touch-sensitive variable sheet unit 145 is provided so as to cover the whole of the input detection unit 45 and is slid and/or pressed down along the operation surface of the display unit 29. It is needless to say that the touch-sensitive variable sheet unit 145 may have a configuration covering a portion of the input detection unit 45. The touch-sensitive variable sheet unit 145 is provided with the embodiment of the touch-sensitive sheet member 150 having a facing-electrode structure.

[0284] In this embodiment, the touch-sensitive variable sheet unit 145 has the transparent base frame portion 53. The base frame portion 53 has predetermined hardness and also has twenty five elliptical apertures r1 to r25. As the base frame portion 53, a polycarbonate (PC), an acrylic resin (PMMA) or the like having thickness of around 0.01 to 0.5 [mm] is used.

[0285] An electrode pattern 51a for first group and an electrode pattern 51b for second group are electrically divided and arranged in parallel on the upper portion of the base frame portion 53. The electrode patterns 51a, 51b are provided on an insulated base sheet 51A. An electrode pattern 52a for first group and an electrode pattern 52b for second group are electrically divided and arranged in parallel on the lower portion of the base frame portion 53. The electrode patterns 52a, 52b are provided on an insulated base sheet 52A. Element muscle portions G1 to G25 each having predetermined volume are arranged so as to be inserted into the apertures r1

to r25 of the base frame portion 53 one by one. The element muscle portions G1 to G25 are also sandwiched between the electrode patterns 51a, 51b and the electrode patterns 52a, 52b.

[0286] For example, the element muscle portion G1 is inserted into the aperture r1 of the base frame portion 53 or is integrally molded to the base frame portion 53. Similarly, the element muscle portion G2, the element muscle portion G3, the element muscle portion G4, the element muscle portion G5, the element muscle portion G6, the element muscle portion G7 and the element muscle portion G8 are inserted into the aperture r2, the aperture r3, the aperture r4, the aperture r5, the aperture r6, the aperture r7 and the aperture r8, respectively or each is integrally molded to the base frame portion 53. Further, the element muscle portion G9, the element muscle portion G10, the element muscle portion G11, the element muscle portion G12, the element muscle portion G13, the element muscle portion G14, the element muscle portion G15, the element muscle portion G16 and the element muscle portion G17 are inserted into the aperture r9, the aperture r10, the aperture r11, the aperture r12, the aperture r13, the aperture r14, the aperture r15, the aperture r16 and the aperture r17, respectively or each is integrally molded to the base frame portion 53.

[0287] Also, the element muscle portion G18, the element muscle portion G19, the element muscle portion G20, the element muscle portion G21, the element muscle portion G22, the element muscle portion G23, the element muscle portion G24 and the element muscle portion G25 are inserted into the aperture r18, the aperture r19, the aperture r20, the aperture r21, the aperture r22, the aperture r23, the aperture r24 and the aperture r25, respectively or each is integrally molded to the base frame portion 53. In a case in which the above-mentioned insertion method is employed, the respective element muscle portions G1 to G25 is bonded to the electrode patterns 52a, 52b through ring shaped double-sided tapes 56. The element muscle portions G1 to G25 constitute the sense-of-touch-representing unit. Each of the element muscle portions G1 to G25 has, for example, an elliptical cylinder shape and thickness of around 0.01 to 0.5 [mm].

[0288] In the above-mentioned base frame portion 53, the apertures r1 to r12 for the keys of numerals "0" to "9", the key of symbol "*", the key of symbol "#", or the like and the apertures r13 to r17 for the cross key, which correspond to the icon images for the input operation, respectively have elliptical shapes. The above-mentioned element muscle portions G1 to G25 are arranged corresponding to the keys K1 to K25 of various kinds of functions.

[0289] For example, the element muscle portion G1 is arranged on the key K1 of numeral "1" of the icon image displayed on the display unit 29. The element muscle portion G2 is arranged on the key K2 of numeral "2" of the icon image displayed on the display unit 29. The element muscle portion G3 is arranged on the key K3 of numeral "3" of the icon image displayed on the display unit 29. The element muscle portion G4 is arranged on the key K4 of numeral "4" of the icon image displayed on the display unit 29. The element muscle portion G5 is arranged on the key K5 of numeral "5" of the icon image displayed on the display unit 29. The element muscle portion G6 is arranged on the key K6 of numeral "6" of the icon image displayed on the display unit 29. The element muscle portion G7 is arranged on the key K7 of numeral "7" of the icon image displayed on the display unit 29. The element muscle portion G8 is arranged on the key K8 of numeral "8" of the icon image